

# How to facilitate and make the academic libraries more accessible to young researchers, especially by implementing open access

*Gunnstein Akselberg*  
*Ane Landøy*

## Authors

**Prof. Gunnstein Akselberg**, University of Bergen, Norway

E-mail: [gunnstein.akselberg@nor.uib.no](mailto:gunnstein.akselberg@nor.uib.no)

**Ane Landøy**, librarian, University of Bergen Library, Norway

E-mail: [Ane.Landoy@ub.uib.no](mailto:Ane.Landoy@ub.uib.no)

## Abstract

In this article the authors discuss how to make the academic libraries more accessible to young researchers. They focus on different ways in which the accessibility may be strengthened, in particular the role of open access in this perspective.

In recent years the research perspective has become more and more important - not only in doctoral education but also in education and teaching at all three levels: Bachelor, Master's and Ph. D. levels (cycles 1-3). In connection with this development the academic libraries have become more important work areas for students as they actively access the sources deposited in these libraries. In addition, the students are offered support and guidance by the library staff whose role now includes more than being in charge of book orders.

Open access is a central component of the new role of the academic libraries. Open access is an important knowledge platform which represents an efficient system for electronic research registration and publication, and is consequently crucial in the academic libraries' function of assisting the scientific community in their scholarly communication.

In order to get the most out of these modern research libraries, the authors recommend close cooperation between the academic libraries and the Faculty administration and between the academic libraries and the academic staff. The academic libraries must also take practical steps to become more IL accessible and to acquire, maintain and update efficient technical equipment. The physical space required must also be borne in mind in order for the academic libraries to become social research arenas.

**Cuvinte-cheie:** *academic libraries; academic research; electronic research registration; electronic research publication; information literacy; open access; research administration; research education; research libraries; scholarly communication; student research supervision*

## 1. Introduction

### a) Research and three cycles

Today Ph.D. candidates (the 3rd cycle in the Bologna process) are taught how to carry out research through postgraduate education and systematic teaching. Previously one often acquired research knowledge and competence by reading academic texts related to one's field of study, by participating in courses offered in methodology and writing and by meeting one's academic supervisor in a particular academic discipline. Today, knowledge of research practice and ethics is also a main component in undergraduate and graduate courses (the first and second cycles) (1).

In modern doctoral education young researchers are to be taught three central skills (in all three cycles): scientific gathering of relevant knowledge, scientific use of relevant knowledge and scientific presentation of the research process and the research results (cf. academic writing) (2).

### b) Open access

According to „The Berlin declaration for Open Access to Knowledge in the Sciences and Humanities” open access contributions must satisfy two conditions: 1) Free and irrevocable access to and further use of a work, in any digital medium, with proper attribution of authorship, and 2) the deposition of the work and all supplementary documents in a online repository using a recognized electronic format (3).

Open access can be seen as one example of a scholarly communication movement. It has been developed and championed by scholars for scholars to increase the impact of future scientific research and create a cost-effective publication system. Libraries also participate in this movement. The goal of open access is to enhance scientific knowledge work by making peer-reviewed research literature openly available on the Web with the creation of institutional preprint repositories or archives (sometimes called „The green route”) or by creation of online journals that are freely available to the end-user (called „The golden route”).

„The Open Access movement in scholarly

---

## How to facilitate and make the academic libraries more accessible to young researchers, especially by implementing open access

---

communications poses new issues and concerns for education in general and information literacy education specifically. Open Access can affect the availability of new information, instructional materials, and scholarship in education” (4).

Institutional repositories with open access (OA) have been developed nationally and internationally in recent years. At the University of Bergen, the library has been instrumental in developing and establishing BORA (Bergen Open Research Archive), which is a digital repository of research output from institutions in the Bergen area. BORA contains full-text peer-reviewed journal reprints, theses, dissertations, and other digital research materials.

The library also offers help for any individual scholar, research group or academic department that would like to create an open access online journal, and has itself founded the journal „NORIL”.

### 2. The academic libraries as primary IL-sources

Academic libraries see their mission and vision as supporting the academic activities of their institutions, that is research and teaching.

This means that academic libraries define their need for information sources as needs „on behalf of” their academic institution. Academic libraries do not consider their information needs as to be „on behalf of” themselves. In the last decades one has seen enormous technological changes in the academic world, and also substantial changes both in the amount of information available, and the ease of availability for this information. Thus, now a major task for the library is to help scholars get access, and preferably easy access to a broad range of electronic resources.

„It is especially important to assist the scientific community in their scholarly communication, by helping to organise effective systems for electronic research registration and publication, such as institutional repositories and other open access archives (journals etc.)” (5).

The University of Bergen Library has participated in developing the online course „Search and Write”. One of the most important goals of the Search & Write course is to help

students at all levels become more information literate.

Information literate means that one knows that one needs information, how to search for relevant information and how to use the information in scholarly work.

The Library tells the scholars: „You will be information literate when you have obtained information sources and use them in your work.” The information needs for students and academics are similar, with there being something one needs to find out more about, and this „something” is the object of ones research. This process of curiosity, doubt and wonder is the driving force of the research process.

But why is Information Literacy given in an organized course run by the library and not fully embedded in the courses, and taught by the teaching staff?

One reason has to do with wishes of the University of Bergen Library, as for other academic libraries in Norway. Here, the academic libraries saw the situation around year 2000, with access to an enormous amount of information, enough to drown in, as an opportunity to show ones relevance to the everyday business of the University.

„At the University of Bergen Library (UBL) the time was thus ripe for change; a new set of student services were needed. Until this time, the principal focus of the library had been the information needs of university researchers. For instance, students did not have access to all library services until they had reached the master level. However, after an official national report of higher education (Ministry of Education and Research, 2000), it became clear that our focus would in future need to include the student body in its entirety. The report described the institutional libraries and their services as vital resources in student learning - for students on all degree levels” (6).

### 3. How to promote the academic library through open access

Universities today need to think about different ways of being visible for the stakeholders and the general public. The University of Bergen’s vision is to be „an

---

## How to facilitate and make the academic libraries more accessible to young researchers, especially by implementing open access

---

international visible research university". Several different international reports focus on the fact that the University's ranking on international ranking lists may be improved as a result of having an Institutional Repository where researchers archive their scholarly work (7, 8). When this is recognized by the University leadership, it helps supporting the ideals of Open Access. At the same time, the library, as a provider of the service, will have recognition.

Most libraries support the Open Access ideas and movement. In an academic setting, however, the library can not be the sole promoter of these ideas, but must work in close collaboration with the University leadership and scholars with a high degree of visibility and trustworthiness in the academic community. The library will be visible through being a service provider for scholars who want or are obliged to archive their material in the institutional repository.

The library can also be visible through the teaching for students and scholars when it comes to the finding and use of information resources for research, especially by promoting the institutional repository and other open access initiatives that can be reached from the library web page for resources.

### 4. The faculty and the academic researcher - how to promote the library

If students are to benefit the most from the academic libraries' role and their function as guardians of knowledge, and to have the best possible access to the sources in their possession, it is imperative that information and knowledge about the libraries' role with regards to information for research be disseminated by both the Faculty administration, represented by the Department administration, and the Faculty Academic administration, represented by the academic staff and supervisors at the various departments, through teaching and supervision. The Faculty administration must organise information meetings and courses and must provide the opportunity to access the sources of knowledge deposited in and provided by the Academic Libraries. This practice must be institutionalised by allocating a certain number of hours to the teaching of Information Literacy, the

teaching of which should be mentioned in the teaching plan. There is often competition with regard to the exact number of hours allocated to teaching. The teaching of Information Literacy should, however, be prioritised as the quality of research depends on it to a great extent. One of the most important tasks of the universities is precisely to carry out research- of the best possible quality (9).

At the University of Bergen, library staff attends the orientation meetings at the beginning of each term, an arrangement which has proved most satisfactory. During the presentation students are provided with general knowledge about the academic library and the sources available. The meeting provides a platform from which further contact with the students can be developed. The Library also organises practical courses on how to access the sources available, for instance on how to navigate and search for information in databases, on how to find books in shelves and how to order books not openly available. In addition, the library also offers courses which teach for instance citation techniques, the use of sources and different reference systems and techniques (10).

Courses related to research ethics and how one can and should avoid plagiarism of other people's research results and research presentations are also offered. Such arrangements must be planned in close cooperation with the Faculty administration and leadership so that these offers appear as compulsory units in the timetable and become a permanent part of the information dissemination logistics in all three cycles.

A greater challenge than that of the administrative responsibility related to ICT in cooperation with the Faculty libraries is the participation of the academic communities and individual teachers and supervisors. The knowledge and insight of the academic staff of the academic sources available in each library has traditionally been limited. The amount of time spent on Information Literacy in or in addition to ordinary teaching and supervision also varies considerably. Academic staff and supervisors also vary with regard to their motivation to disseminate knowledge and competence about Information Literacy. In the long run it would be a great advantage if the academic staff at the various faculties could cooperate systematically over a

---

## How to facilitate and make the academic libraries more accessible to young researchers, especially by implementing open access

---

long period of time with the Library staff in matters related to research supervision and doctoral education (11). At the undergraduate level (1st cycle) a large number of Library staff can actively participate. At the postgraduate level (2nd cycle), and especially at the doctoral level (3rd cycle), only academic librarians should be consulted in each case (12). Cooperation on access to and use of knowledge related to IL at the supervisory level is likely to become one of the major areas of development in the years to come as well as one of the major challenges as far as fields of study, administration and logistics are concerned.

### 5. Practical and technical facilities

If the academic library is to become more IL accessible to young researchers, practical steps must be taken and efficient technical equipment must be acquired (13). Today practical measures are limited - as is the access to necessary technical software. Firstly, the physical space needed to access the IL sources available at or through the library is often under-dimensioned. Many libraries currently do not have enough physical space for these activities- mainly as they were not built to meet these requirements. When these libraries were planned and built, such tasks and services were not of great importance. Secondly, technical equipment is usually limited to some computers on premises. The number of computers on premises must increase in order for young researchers to be able to efficiently carry out tasks related to their research. Larger physical space and access to more computers are therefore important.

In addition, the technical equipment - including hardware and software - must always be operative and must meet the technical standard needed to get the most out of the technical facilities. This implies that technical hardware and software must be updated and maintained on a regular basis (14).

The cooperation between the IT-department and the library must be close, in order for the library's electronic resources to be available for users.

Most of the electronic library resources that are available for the students and young

researchers will normally be presented through some kind of portal. In addition to making sure the resources, open access or subscriptions, are presented in an optimal manner, it is also important that the finding and using of these resources are shown and explained in the teachings from the library. This can happen as one-to-one explanations or more formalized courses for larger groups of students.

### 6. The library as a social and active/everyday research arena

Access to and use of knowledge for research through cooperation between the Faculty leadership, academic staff and academic library staff is crucial if we are to reach our goals of more, better and innovative research. In this perspective the libraries must become places where it is natural for students in all three cycles to search for and use knowledge. This includes the „Digital library” manifested in Institutional Repositories, and the „physical library”. The students must have the opportunity to use the libraries as their natural workplace- in addition to lecture halls and the traditional reading rooms. In order for the libraries to appear user friendly to students with regard to ICT, which concerns much more than the ordering and gathering of academic literature, the physical surroundings (room organisation and solutions, workplaces, access to resources) must be appropriate and the distance to the academic communities must be short and practical. The students should also feel at home in the libraries as social spaces, canteen/café, toilets etc. are found on the premises.

In order to bring about these changes in the best possible manner, there must be close cooperation between the library, the Faculty administration and the academic staff. One must strive to establish a culture in which students gradually change their work habits and practices by being motivated to spend their time partly in traditional reading rooms and partly in specially designed work spaces in libraries equipped with effective and state-of-the-art technical facilities.

With the library as workplace, the effect of access to information through open access will be twofold. The students will have access to new cutting-edge research - in addition to being able to

## How to facilitate and make the academic libraries more accessible to young researchers, especially by implementing open access

participate in research by publishing their own written work. Supervisors must encourage students to produce written work which after having been examined by supervisors and fellow students - may be made available in open access. Text production must therefore become as natural as reading and text analysis for more students in the future.

### NOTES

1. *Bologna 2009*. [http://www.ond.vlaanderen.be/hogeronderwijs/bologna/conference/documents/Stocktaking\\_report\\_2009\\_FINAL.pdf](http://www.ond.vlaanderen.be/hogeronderwijs/bologna/conference/documents/Stocktaking_report_2009_FINAL.pdf).
2. **DYSTHE, Olga; HERTZBERG, Frøydis; LØKENSGARD HOEL, Torlaug**. *Skrive for å lære. Skrivning i høyere utdanning*. 2000. Oslo: Abstrakt forlag.
3. *The Berlin declaration for Open Access to Knowledge in the Sciences and Humanities*. 2003. <http://oa.mpg.de/openaccess-berlin/berlindeclaration.html>.
4. **REPANOVICI, A.** Marketing Research about Attitudes, Difficulties and Interest of Academic Community about Institutional Repository. In: *Advances in Marketing, Management and Finances. Proceedings of the 3rd International Conference in Management, Marketing and Finances (MMF '09)*. Houston, USA, April 30-May 2, 2009, p. 88-95.
5. **GARNES, K.** About the digital library at University of Bergen Library. In: **GARNES, K.; LANDØY, A.; REPANOVICI, A.** (eds.), *Aspects of the digital library*. 2006. <http://hdl.handle.net/1956/1822>.
6. **TONNING, A. S. V.** The learning centre model at the University of Bergen Library. In: **Garnes, K.; Landoy, A.; Repanovici, A.** (eds.), *op. cit.* <http://hdl.handle.net/1956/1826>.
7. **REPANOVICI, A.**, *op. cit.*
8. **REPANOVICI, A.** Measuring the visibility of the universities' scientific production using scientometric methods. In: *The 6th WSEAS/IASME International Conference on EDUCATIONAL TECHNOLOGIES, (EDUTE '10)*, may 2010. <http://www.wseas.us/conferences/2010/tunisia/edute/Plenary1.htm>.
9. **KUHLTHAU, C.C.** *Seeking meaning. A process approach to library and information services*. 2nd edition. Westport: Libraries Unlimited, 2004.
10. **LANDØY, Ane; REPANOVICI, Angela**. Marketing research in Internet resources. In: *Internet Librarian International*, 16-17 October 2008. <http://www.internet-librarian.com/2008/day.php?day=Friday#TrackB>.
11. **TORRAS, Maria-Carme; SÆTRE, Tove Pemmer**. *Information Literacy Education: A process*

*approach. Professionalising the pedagogical role of academic libraries*. Oxford: Chandos Publishing, 2009.

12. **AKSELBERG, Gunnstein**. How to optimise relations between library, administration and teaching staff. In: *Revista Română de Biblioteconomie și Știința Informării*, vol. 5, nr. 3, 2009, p. 7-11.

13. **TORRAS, M.C.; SKAGEN, T.** *Search and Write ('Søk og skriv'): Helping postgraduate students with their work* (Internet), workshop presented at the Librarian's Information Literacy Annual Conference (LILAC), 26-28 March 2007, Manchester Metropolitan University, UK. <http://www.cilip.org.uk/specialinterestgroups/bysubject/informationliteracy/lilac/lilac2007/parallelshmt> (accessed: 31 July 2007).

14. **WESSELS, Bridgette**. *Understanding the Internet. A Socio-Cultural Perspective*. Houndmills, Basingstoke, Hampshire & New York: Palgrave Macmillan, 2010.

### BIBLIOGRAPHY

1. **AKSELBERG, Gunnstein**. How to optimise relations between library, administration and teaching staff. In: *Revista Română de Biblioteconomie și Știința Informării*, vol. 5, nr. 3, 2009, p. 7-11.
2. *The Berlin declaration for Open Access to Knowledge in the Sciences and Humanities*. 2003. <http://oa.mpg.de/openaccess-berlin/berlindeclaration.html>.
3. *Bologna 2009*. [http://www.ond.vlaanderen.be/hogeronderwijs/bologna/conference/documents/Stocktaking\\_report\\_2009\\_FINAL.pdf](http://www.ond.vlaanderen.be/hogeronderwijs/bologna/conference/documents/Stocktaking_report_2009_FINAL.pdf).
4. **DYSTHE, Olga; HERTZBERG, Frøydis; LØKENSGARD HOEL, Torlaug**. *Skrive for å lære. Skrivning i høyere utdanning*. 2000. Oslo: Abstrakt forlag.
5. **GARNES, K.; LANDØY, A.; REPANOVICI, A.** (eds.). *Aspects of the digital library*. 2006. <http://hdl.handle.net/1956/1821>.
6. **GARNES, K.** About the digital library at University of Bergen Library. In: **Garnes, K.; Landoy, A.; Repanovici, A.** (eds.), *op. cit.* <http://hdl.handle.net/1956/1822>.
7. **KUHLTHAU, C.C.** *Seeking meaning. A process approach to library and information services*. 2nd edition. Westport: Libraries Unlimited, 2004.
8. **LANDØY, Ane; REPANOVICI, Angela**. Marketing research in Internet resources. In: *Internet Librarian International*, 16-17 October 2008. <http://www.internet-librarian.com/2008/day.php?day=Friday#TrackB>.
9. **MCNEELY, Ian F.; WOLVERTON, LISA**. *Reinventing knowledge. From Alexandria to the Internet*. New York and London: Norton & Company, 2008.

---

## How to facilitate and make the academic libraries more accessible to young researchers, especially by implementing open access

---

**10. REPANOVICI, A.** Marketing Research about Attitudes, Difficulties and Interest of Academic Community about Institutional Repository. In: *Advances in Marketing, Management and Finances. Proceedings of the 3rd International Conference in Management, Marketing and Finances (MMF '09)*. Houston, USA, April 30-May 2, 2009, p. 88-95.

**11. REPANOVICI, A.** Measuring the visibility of the universities' scientific production using scientometric methods. In: *The 6th WSEAS/IASME International Conference on EDUCATIONAL TECHNOLOGIES, (EDUTE '10)*, may 2010. <http://www.wseas.us/conferences/2010/tunisia/edute/Plenary1.htm>.

**12. TONNING, A. S. V.** The learning centre model at the University of Bergen Library. In: Garnes, K.; Landoy, A.; Repanovici, A. (eds.), *op. cit.* <http://hdl.handle.net/1956/1826>.

**13. TORRAS, M.C.; SKAGEN, T.** *Search and Write ('Søk og skriv'): Helping postgraduate students with their work* (Internet), workshop presented at the Librarian's Information Literacy Annual Conference (LILAC), 26-28 March 2007, Manchester Metropolitan University, UK. <http://www.cilip.org.uk/specialinterestgroups/bysubject/informationliteracy/lilac/lilac2007/parallelshtm> (accessed: 31 July 2007).

**14. TORRAS, Maria-Carme; SÆTRE, Tove Pemmer.** *Information Literacy Education: A process approach. Professionalising the pedagogical role of academic libraries*. Oxford: Chandos Publishing, 2009.

**15. WESSELS, Bridgette.** *Understanding the Internet. A Socio-Cultural Perspective*. Houndmills, Basingstoke, Hampshire & New York: Palgrave Macmillan, 2010.